

SPORTS TECHNOLOGY OPPORTUNITY: Hollow Metal Core Golf Ball

July 2008



1 Executive Summary

The golf ball market is waiting for the introduction of a new golf ball that addresses specific fundamental control problems faced by the average amateur golfer. This market has proven to be willing to pay for products that demonstrate results, and it is receptive to new technology. Golf ball technology has evolved over the course of time; however, advancements have not kept pace with innovations made in other areas such as clubs. New golf balls are typically an extension of a current design. Through the application of advanced material sciences, NEWCO proposes to introduce a new golf ball technology that is radically different from the products that are currently available to the mass market. The NEWCO Hollow Core Technology is expected to gain rapid adoption and capture share in the golf ball market.

- Economically attractive manufacturing process in place
- Patent protected Nos. 6004225, 6709527, 6976925, and other U.S. and International patents pending.
- Conforms with USGA rules - USGA Approval Date (Gen 1): February 7, 2006

The technology is based on NanoDynamics' first generation (Gen 1) NDMX S110 golf ball that was released in late 2005. The Gen 1 ball was successful on several levels:

- The market was receptive to the new hollow core technology.
- Proven accuracy improvement versus standard golf balls.
- On the list of USGA conforming golf balls.

There are two primary opportunities to extend the performance of the Gen 1 ball. When compared to a standard ball, users report a "loss of distance" and a "hard feel." NEWCO is being formed to take ownership of the NDMX technology and undertake an effort to advance the state of the technology and develop two products that emphasizes the advantages to deliver a hollow-core ball with high accuracy, premium distance, and superior feel, the Generation 2 (Gen 2) balls.

We are currently working on the first ball, the NDMX Gen2 Pro. This ball has been constructed with a smaller hollow-metal core and correspondingly thicker mantle layer, when compared with the NDMX S110. The thicker mantle layer will assure distance competitive with currently available leading balls as well as providing a softer feel than the NDMX Gen1 ball. It is also our objective to provide superior accuracy versus a standard ball with this product. The second GEN2 ball will be produced for users focused on improving accuracy, the Gen2 Amatuer. Current design concepts have this ball consisting of a larger core than the Gen2 Pro which will result in superior accuracy to help the user keep the ball in play. The Amatuer ball will have premium distance and feel, the development time and resources needed to produce it is expected to be longer than the Pro series.

Financial Goals

	2009	2010	2011	2012	2013
Revenues	1,158,200	6,182,100	12,415,700	17,621,400	23,625,000
Margin %	-3%	25%	61%	65%	64%
Net Profits	(773,400)	333,400	5,459,800	8,495,400	11,454,100
Premium Golf Balls Sold (dz)	31,800	171,400	348,000	530,100	811,200
Market Share - Premium Balls	0.0%	0.4%	0.8%	1.2%	1.8%

In order to achieve the goal of 1.8% of the premium golf ball market share by 2013, the company is seeking equity funding of up to \$5 million to be completed by December 31st, 2008.

2 Vision

To create the next transformation in golf ball technology.

3 Mission

To become the worlds largest provider of golf ball cores and core technology through organic growth, licensing and other collaborations with strategic partners.

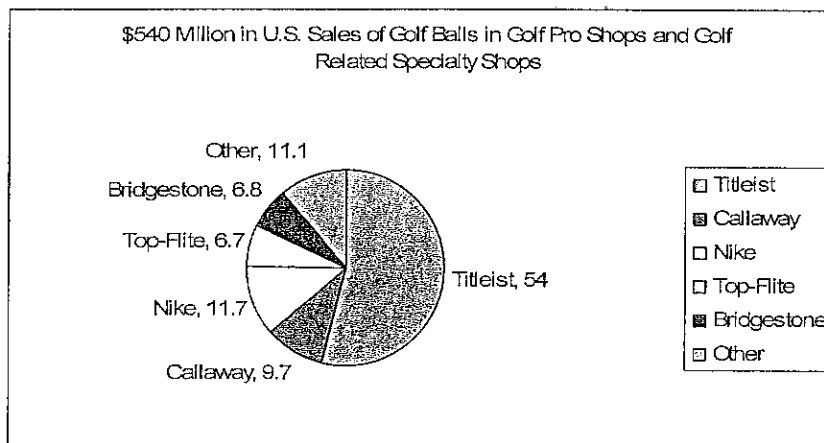
4 Opportunity

Professional golfers have demonstrated the ability to consistently strike a golf ball in such a way that they are able to impart a certain degree of control on the flight trajectory of that ball. Consequently, professionals prefer to use a ball that is best aligned with their ability to impart a controlled sidespin which results in a desired draw to the left or a fade to the right. The ability to impart a controlled draw or fade allows golfers to take an aggressive approach to a targeted landing area while avoiding obstacles, thus lowering their score. Although the average golfer has the ability to impart sidespin on a ball, they lack the skill required to control that sidespin and therefore draws and fades are imparted at random and are often exaggerated as sharp hooks to the left and severe slices to the right. The end result is higher scores as the ball typically ends up in the rough, woods or lost.

All golfers strive to achieve better results in two main areas – the ability to hit the ball further, and the ability to improve accuracy.

Although the modern golf ball has evolved considerably, the development has been focused on improving distance and increasing control. The challenge to designers of polymer matrix golf balls, however, lies in the fact that these characteristics have an inverse relationship. An increase in distance off the tee via the use of a low spin rate golf ball typically requires sacrificing control around the green. Conversely, the effort to increase control around the green by using a high spin rate golf ball will negatively impact the average golfer off the tee as the hook and slice characteristics are exaggerated. A combination of the advantages of a low-spin and a high-spin ball would require a redistribution of mass and would significantly increase the ball's design range. This type of ball would be very difficult and costly to produce using conventional golf ball construction methods that rely on polymer engineering. This is due to the fact that polymers do not vary considerably in density and modulus, thus precluding any significant mass redistribution. An opportunity exists for the introduction of new golf ball technology that can be uniquely tailored to address the limited skills of average golfers or to leverage the advanced skills of the professional golfer. By using a hollow core, the desired characteristics of a low-spin and a high-spin ball can be achieved.

Golf DataTech recently provided data to the Wall Street Journal (February 20, 2007) estimating the size of the golf ball market in the U.S. at *golf pro shops and golf specialty stores* at \$540 million annually. This does not include big box stores such as Wal-Mart, Target, and others – with the total market size between \$700 million and \$1 billion annually in the U.S. This represents about half of the world-wide market for golf balls. The current division of the market at golf-centric shops among U.S. ball manufacturers is shown below.



The total market for golf balls has not grown appreciably since the late 1990's and the golf ball market is expected to grow at a rate of approximately 2% per year. The result has been that the ball manufacturers have been aggressively pursuing market share belonging to others. We believe that this market situation is good for a new, distinctive technology that could set apart a ball manufacturer from its competition.

The total market size of premium golf balls is estimated to be 25% of the total worldwide golf ball market and is expected to grow at the ****same 2% rate****. The market for premium golf balls is extremely competitive, as there are a number of entrenched companies with established market share.

We will compete on the basis of unique technology, quality and performance.

5 Market Strategy

5.1 Product Positioning

NewCo, Inc. has developed a prototype version of the Gen 2 pro ball. This Pro S090, which stands for Steel-0.9 inch diameter metal core. It is indeed the first-ever and only hollow metal core golf ball. The Gen 2 pro is designed and engineered for golfers wanting a higher level of accuracy and precision. The ball is constructed with a steel core and DuPont mantle and Surlyn cover, with a modified 432 dimple-pattern cover.

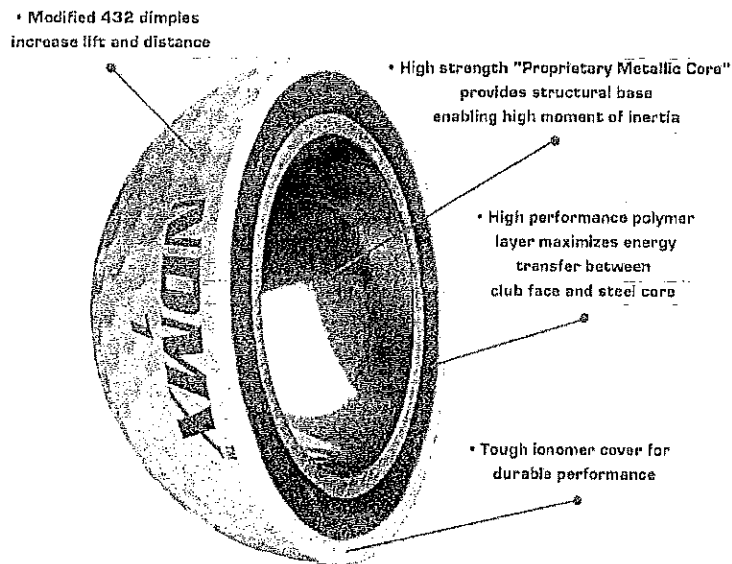


Fig. 6 Picture of cross-sectioned Gen 2 pro ball.

The Newco team has worked to analyze customer feedback and testing data from the Gen 1 ball and has identified two key areas for improvement in the Gen 2 ball: loss of distance and "hard" feel. The Gen1 Hollow Metal Core Golf Ball has been shown to have a carry distance that is approximately 7 percent less than a conventional ball. The conclusion is that the technology is very close to being distance-competitive in the market but some work is still necessary. As mentioned previously, the hollow metal core golf ball has consistently demonstrated that it has a straighter trajectory (less horizontal movement) as it travels downrange.

Golf ball design is a complex engineering problem that couples materials science, impact dynamics, rotational physics, and aerodynamics. Most golf balls on the market today have undergone a limited design cycle, and are merely extensions of previous products, or at best marginal improvements over the previous products ("evolutionary advancements"). In fact, many golfers today can not discern

between a golf ball that was designed decades ago from the most modern golf ball that is designed and produced today.

The Newco product development team has taken a completely different approach, basing the NDMX on a revolutionary advancement: the hollow metal core. Taking a totally new approach to golf ball design has allowed the team to essentially add another degree of freedom to ball design. This enables the team to achieve performance objectives not previously found. Three of the key design parameters include Frequency Matching (MA), Moment of Inertia (MOI) and a much broader range of control over Modulus. These important tools, that other design teams do not employ, allow the Newco team to produce revolutionary golf balls.

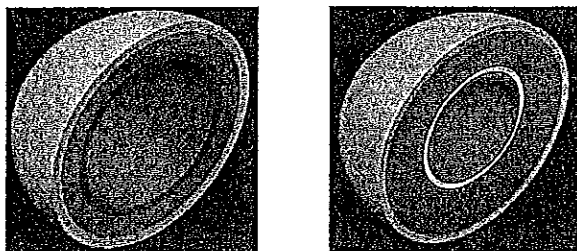


Fig. 1 Evolution of NDMX technology Generation 1 (left) and Generation 2 (right)

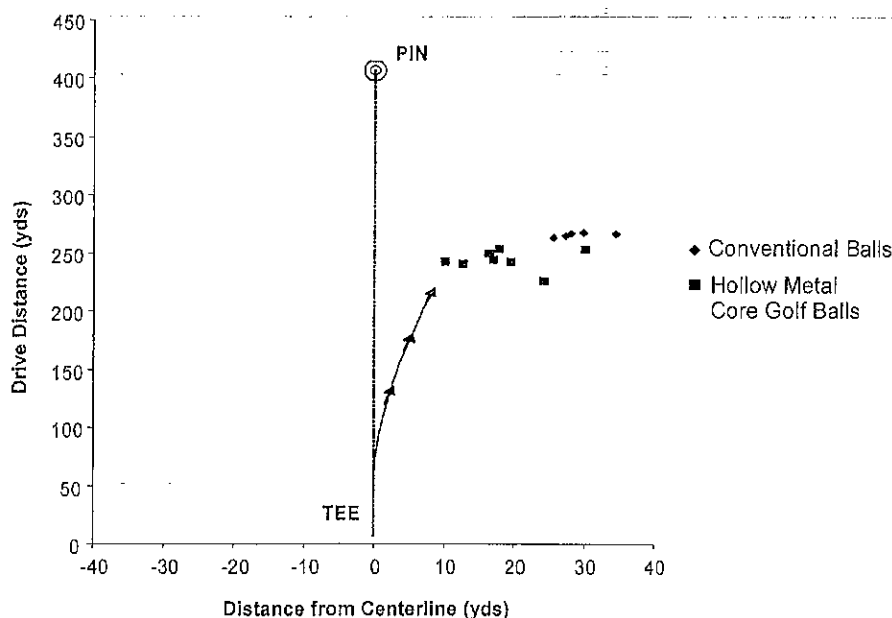


Fig. 2 Comparison of Intentional Slice Dispersion: Conventional Balls vs. hollow metal core golf balls

5.2 Product Pricing

We are selling a premium product using brand new patented technology that conforms with USGA regulations, therefore, initially, we will be selling the Gen2 Pro and Gen2 at the suggested retail price of \$34.99 per dozen. As we continue to produce and sell in greater quantities, the economies of scale will allow us to drop our selling price to as low as \$24.99 per dozen by 2013.

5.3 Sales & Distribution

The target audience for NDMX golf balls are both the average and professional golfer. Both types of golfer are looking for an edge to help improve their game but the type of ball they need are different. The professional can control the spin much more effectively than the average golfer, therefore there is a greater need for distance first, then accuracy. Conversely, the average golfer is more interested in keeping their shot in the fairway therefore there is a greater need for accuracy then distance. Both of the objectives will be addressed for each style player by selling two different balls with different sized cores.

The sales effort will focus primarily on certain distributors that already have an existing network of sales and marketing with large retail outlets as well as those outlets located on golf courses. Overall, our target outlets are retailers that sell several lines of middle to high quality golf equipment and are prepared to provide a certain level of customer support and guidance.

Sales will be supported by regional sales representatives located in defined geographic territories, centrally located telephone sales people and customer service reps.

Efforts will be coordinated to ensure appropriate levels of broad, as well as deep, coverage of retailers in each geographic region is achieved.

The Gen2 balls will be marketed primarily in North America; however, efforts will be made to penetrate key non-domestic markets in Europe and Asia. Foreign markets will be serviced by distributors and resellers.

5.4 Marketing

The Company will focus advertising and promotion efforts in North American on a combination of television and print media outlets. Advertising of products both in North America and internationally will be handled, in part, by our distributors and resellers.

We plan to establish relationships with professional golfers to help promote the Company's products. We will enter into endorsement arrangements with key professionals and professional tours to promote our golf balls. Approximately 10% of revenues will be allocated for advertising, promotional and endorsement related expenses in the latter years of operation. That percentage will be higher in the earlier years.

6 Business Strategy

6.1 Business Model

Revenue

	2009	2010	2011	2012	2013
Revenues	1,158,200	6,182,100	12,415,700	17,621,400	23,625,000
Compounded Annual Growth rate = 83%					

We will generate revenue from, primarily, two products, the Gen2 Pro and the Gen2 amateur. The first two years, 2009 and 2010, revenue will come primarily from the Gen2 Pro. During the second year of the plan, the Gen2 amateur ball is expected to be completed and will begin to grow as a percentage of total revenue by the third year to 25% and continue to grow to 62% and 79% in year 2012 and 2013, respectively. Over the five year period, the compounded annual growth rate will be approximately 83% per year.

Gross Margins

	2009	2010	2011	2012	2013
Gross Margin	(32,518)	1,542,898	7,567,629	11,367,835	15,212,476
Margin %	-3%	25%	61%	65%	64%

Gross margin is expected to grow as we take advantage of the economies of scale in the production cycle. We expect margin percentage to grow to approximately 65% of sales.

Market Share

	2009	2010	2011	2012	2013
Premium Golf Balls Sold (dz)	31,800	171,400	348,000	530,100	811,200
Market Share - Premium Balls	0.0%	0.4%	0.8%	1.2%	1.8%

By year 5, we expect sales of 811,200 dozen which is approximately 1.8% of the premium ball market.

Use of Funds

	Minimum \$1,500,000	Intermediate \$3,000,000	Maximum \$5,000,000
Operations / Manufacturing	\$ 725,000	\$ 1,300,000	\$ 1,100,000
Capital Expenditures	250,000	750,000	750,000
Purchase Ownership (1)			2,000,000
Research & Development	125,000	200,000	200,000
General Corporate	250,000	450,000	450,000
Offering Expense	150,000	300,000	500,000
Total	\$ 1,500,000	\$ 3,000,000	\$ 5,000,000

(1) With a \$5,000,000 raise, Newco will purchase the 40% ownership of Newco from NanoDynamics.

Planned Major Milestones

January 31, 2008 – Begin research and development on the Gen2 Pro
 August 1, 2008 – Begin private placement raise for funding of the 5 year plan
 September, 2008 – Purchase capital equipment needed to complete the Gen2 Pro
 December, 2008 – Complete research and development of the Gen2 Pro and begin commercialization
 December, 2008 – Complete private placement raise
 April 2009 – Begin commercialization of Gen 2 pro golf ball
 August, 2009 - Production volume increase to 1,000 dozen per week
 October, 2009 - Begin research and development of Gen 2 Amateur
 2010 – Achieve profitability

7 Organization and Operations

Product Development

We expect to have the professional version of the generation 2 golf ball

Manufacturing

The manufacturing process is composed of several vendors therefore, the operations are highly variable in nature. This allows for flexibility in the production cycle and the prevention of unnecessary additional fixed costs during the early stages of development.

The production cycle is as follows:

Graph needed – Core production – Core welded – Injection mold – covered – painted – packaged

Copyrights and Patents

open

8 Management

Doug DuFaux
Dan Deighan
Tim Deighan
Anthony DeSimone

Bill Stronge
Frank Thomas

9 Core Competencies and Challenges

9.1 Risk Assessment

9.1.1 Technology Risk

- There is minimal technology risk involved in this product as the performance has been demonstrated. There is a risk that future materials selected for various components of the ball may not perform as expected or may not have suitable durability for this application. These, however, could be ruled out during product testing.

9.1.2 Manufacturing Risk

Manufacturing risks are relatively low, given the volume-scale processes employed to produce these balls. Processing will require mostly commercially available machining equipment and presses.

- Processing defects, however, could contribute to performance failure of the ball. For example, a faulty weld may result in loss of COR and durability of the product. An improperly monitored injection molding process may result in cores not being centered, resulting in poor performance characteristics for the product.;

- Development of production tooling may be excessively time consuming, which could impair market entry. Back-up production tooling should be on-hand in case of failure in order to avoid short-term delivery problems.
- Uncontrolled inflation in raw material costs. Raw material supply will be primarily steel and various elastomeric compounds. Metal prices are subject to market fluctuations and extended material supply contracts should ultimately be put in place to reduce risk;

9.1.3 Market Risk

Market risk will depend on various factors:

- Inefficient operations impair production capacity and/or costs;
- Insufficient production capacity. This would impair the company's ability to meet customer requirements, resulting in the loss of repeat business. Conversely, excess capacity would threaten the company's profitability. May occur if product is manufactured under contract by a large company for whom the production levels are too small to merit priority.
- Business interruption, such as unavailability of raw materials, skilled labor, or facilities.
- Early product failure, resulting in reputation damage that severely impacts market uptake.

9.1.4 HSES Risk

Health and safety risks associated with the manufacturing process are no different from conventional metal stamping, welding, and injection molding processes, and use similar energy levels. No specific environmental or security issues are associated with this technology.

9.1.5 IP risk

Patent applications and newly issued patents should be monitored to maintain awareness of the complete landscape.

9.2 Opportunities

The attractiveness of the Hollow Metal Core Golf Ball to the golf industry is that it opens up a new area of design engineering for golf ball manufacturers, providing opportunity for a variety of performance characteristics to be custom-tailored for different skill levels. For the consumer, it is a change in technology similar to the change from wooden drivers to metal drivers. In that case, after some initial product optimization the result was a sea change in the clubs used by golfers, evidenced by the lack of wooden drivers currently available for purchase.

10 Financials

Golf Ball - Second Generation

	2009	2010	2011	2012	2013
Units (Golf Balls) sold	380,953	2,056,240	4,175,841	6,360,280	9,733,3
Total - Revenue	\$ 1,158,156	6,182,071	\$ 12,415,656	\$ 17,621,367	\$ 23,625,1
Total Cost of Revenue	1,190,674	4,639,173	4,848,026	6,253,532	8,412,1
Gross Profit	\$ (32,518)	\$ 1,542,898	\$ 7,567,629	\$ 11,367,835	\$ 15,212,4
Research and Development:					
Salaries	235,000	\$ 185,462	\$ 372,470	\$ 528,641	\$ 708,3
Materials / supplies	122,500	61,821	124,157	176,214	236,3
Outsourced services / contractors	92,500	150,000	175,000	175,000	175,0
Payroll taxes and benefits	75,200	59,348	-	-	6,3
Depreciation / amortization	-	15,000	30,000	45,000	60,0
Travel	58,000	24,728	49,663	70,485	94,1
Conferences / training / dues	24,000	25,000	30,000	30,000	30,0
Freight and shipping	18,000	70,000	85,000	85,000	85,0
Total Research and Development	625,200	591,359	866,289	1,110,340	1,395,1
Sales, General and Administration	115,642	618,207	1,241,566	1,762,137	2,362,1
Operating income (loss)	\$ (773,360)	\$ 333,332	\$ 5,459,775	\$ 8,495,358	\$ 11,454,1

Cost of revenue is composed primarily of costs associated with services rendered by the vendors in our manufacturing process.

Outsourced services is primarily associated with vendors and consultants used to develop the Newco Amateur golf ball and new versions of both the pro and the amateur.

Travel is primarily related to costs associated with trips to the vendors and the strategic partner that will be creating the new material blend, as well as to potential marketing and distribution partners.

Conferences include golf ball trade shows as we begin to pursue marketing opportunities and ramp up our production and sales.

Total golf ball sales in units are expected to be 4.7 million and 9.5 million in 2009 and 2010, respectively.

Royalties to the company that we purchased the rights to the golf ball will begin to be paid in 2009. The royalty arrangement is based on profitability and a percentage of gross profit.

Six employees are budgeted before the end of 2009 and 10 employees before the end of 2010.